

Ethylene Oxide Usage and Emissions

Sterigenics	Atlanta
Emission Controls:	
Sterilizer	Ceillcote
Aerations Rooms	AAT Scrubber
Back Vents	AAT Scrubber

Usage and Emissions:	2019	2018	2017	2016	2015
EtO Usage (lbs)	292,856	424,952	418,653	416,973	328,615
Sterilizer Control Effic. (%)	99.999%	99.999%	99.999%	99.999%	99.960%
Aer. Room Control Effic (%)	99.96%	99.96%	99.96%	99.96%	99.995%
Backvent Effic. (%)	99.833%	99.833%	99.833%	99.833%	0.000%
EO Sterilizer Emissions (lbs)	3	4	4	4	125
EO Aeration Emissions (lbs)	5	7	7	7	1
EO Backvent Emissions (lbs)	5	7	7	7	3,286
EO Fugitive Emissions (lbs)	146.43	212	209	208	164
EO Accidental Releases (lbs):	5.6	2	0	0	0

TOTAL Stack EO Emissions (lbs)	12.36	17.93	17.67	17.60	3,411.68
TOTAL Fugitive EO Emissions (lbs)	152.03	214.88	209.33	208.49	164.31

EO Sterilizer Emissions (#) = $0.95 * \text{EO Usage} * (1 - \% \text{control efficiency})$

EO Aeration Emissions (#) = $0.04 * \text{EO Usage} * (1 - \% \text{control efficiency})$

EO Backvent Emissions (#) = $0.01 * \text{EO Usage} * (1 - \% \text{control efficiency})$

EO Fugitive Emissions (#) = $0.0005 * \text{EO Usage}$